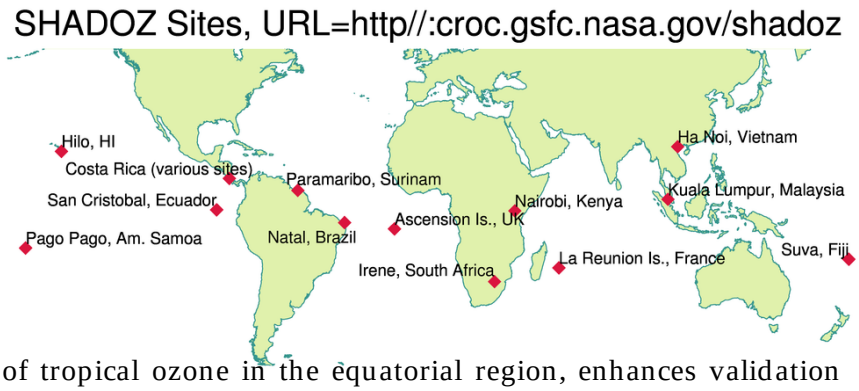
Newsletter No. 21, 10/ 2016

SHADOZ Notes

Southern Hemisphere Additional Ozonesondes

A NASA/ Goddard Space Flight Center public archive of tropical and remote ozonesonde profile data

SHADOZ is a NASA project to augment and archive balloon-borne ozonesonde launches and to archive data from tropical and remote operational sites. The project was initiated in 1998 by NASA/ Goddard Space Flight Center with other US and international co-investigators. There are currently thirteen stations launching ozonesondes in the SHADOZ network. The collective data set provides the first climatology of tropical ozone in the equatorial region, enhances validation studies aimed at improving satellite remote sensing techniques for tropical ozone estimations, and serves as an educational tool to students, especially in participating countries.



SHADOZ Site	Principal Investigator (PI), Operators, and Data Managers
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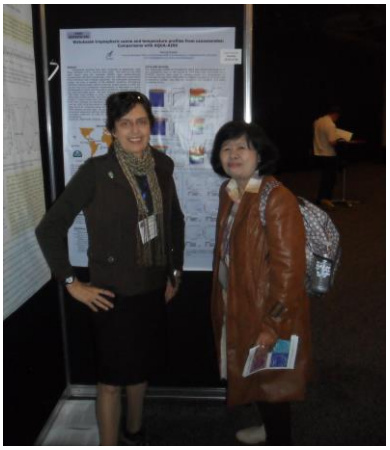
Pago Pago, Am. Samoa	Bryan Johnson (PI; NOAA/ GMD), P. Cullis & C. Sterling (NOAA/ CIRES),
San Cristobal, Ecuador	Bryan Johnson (PI; NOAA/ GMD), P. Cullis & C. Sterling (NOAA/ CIRES)
Suva, Fiji	Bryan Johnson (PI; NOAA/ GMD), Matakite Maata & Francis Mani (USP), P. Cullis, C. Sterling

The Quadrennial Ozone Symposium (QOS) was held 4-9 September 2016 <www.ozone-symposium-2016>. Nine SHADOZ related papers were presented at sessions on tropospheric ozone observations and measurement techniques. Prior to QOS, a three day WMO-GAW-SHADOZ-NDACC Ozone Sonde Expert Workshop was held to discuss outstanding issues concerning operating procedures, reprocessing methods, and the status of homogeneous data records. The meeting comprised ozonesonde experts and station operators, a number of whom are members of the SHADOZ network, as well as ENSCI, Vaisala, and Modem industry representatives. Dr. Herman Smit h.smit@juelich.de led the discussions with one day dedicated to planning a JOSIE-SHADOZ campaign in October 2017. The campaign will focus on profiling capabilities and technical issues in the SHADOZ network. We expect that every ozonesonde-radiosonde instrument combination used in SHADOZ will be tested in this JOSIE. As an international intercomparison, JOSIE-SHADOZ, under the auspices of WMO/ GAW, will bring together at least eight SHADOZ stations to compare the performance of different ozone-radiosonde systems under controlled conditions in the Jűlich simulation chamber that uses a well-calibrated UV-photometer as the Standard Reference.

Photo at the Ozonesonde experts workshop. There were 20-30 participants. Photo: G. Braathen.

SHADOZ members at the QOS banquet (L-R): Gerrie Coetzee (Irene), Françoise Posny (La Reunion), Richard Querel (Lauder), Jacquie Witte, Ryan Stauffer (NASA-GSFC), and Herman Smit (JOSIE). Photos: J. Witte.



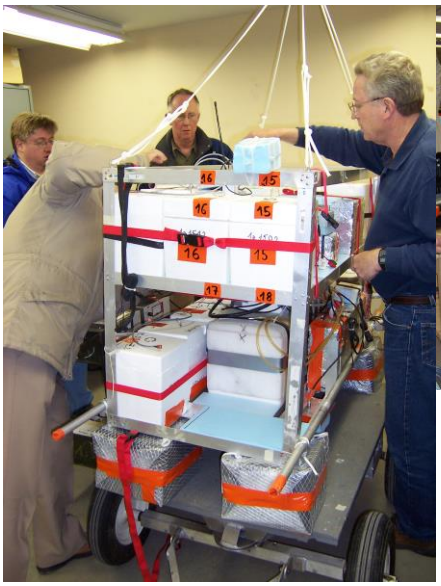
Anne Thompson, Ninong Komala (Watukosek) at QOS Posters. Photo: N. Komala.

Meeting Announcements

NDACC (Network for the Detection of Atmospheric Composition, Change; www.ndsc.ncep.noaa.gov), Steering Committee, 17-21 October 2016, Bremen, Germany. SHADOZ is a cooperating network of NDACC.

AGU (American Geophysical Union) 12-16 December, 2016; San Francisco. Sessions of interest to the ozonesonde community: A11M: Understanding Processes that Influence the Vertical Distribution of Ozone in the Troposphere; Sessions on Atmospheric Trace Species: Observations and Analyses of the Effects of Changing Atmospheric Composition on Stratospheric Ozone and Climate (A41J, A42B, A43A)

Remembering Dr. Mike Proffitt who recently passed away. Mike was at NOAA from 1980-1999 and then a Senior Scientific Officer at WMO, 1999-2004. Mike's UV-photometer recorded the first airborne measurements inside the Antarctic ozone hole in 1987. Mike provided the uv spectrometer for the 2004 BESOS (Balloon Experiment on Standards for Ozone Sondes) campaign. Results of the campaign are in *Deshler, T. et al., 2008. J. Geophys.Res. - Atmospheres, 113,* D04307, doi:10.1029/ 2007JD008975, 2008.



Gondola of sondes with the UV photometer in the center. Mike Proffitt is in the center of both photos.

The gondola launch on a perfect day! Photos: J. Witte.